

Serial Number 10/015,365
Attorney Docket No. Implex-18

REMARKS

I. Status of the Claims

Claims 1-40 are pending.

Claims 1-3, 8-13, 18-23, 28-33 and 38-40 stand rejected.

Claims 4-7, 14-17, 24-27, 34-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

II. Rejection under 35 U.S.C. § 102

The Examiner has rejected claims 1-3, 8-13, 18-23, 28-33 and 38-40 under 35 U.S.C § 102(e) as being anticipated by United States Patent No. 6,463,101 to Hamada ("Hamada"). This rejection is respectfully traversed.

In order to properly anticipate a claim under 35 U.S.C § 102, a single prior art reference must disclose every limitation of the claim in issue. *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1255-56 (Fed. Cir. 1989); *In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986); *see also* MPEP §706.02.

Independent claims 1 and 11 of the present application both require, among other elements: "a first plurality of teeth extending across the upper surface of the body, the first plurality of teeth angling back toward the anterior end of the body; and a second plurality of teeth extending across the lower surface of the body, the second plurality of teeth angling back toward the anterior end of the body."

In contrast, Hamada does not disclose any device having these required elements. The surgical rasps 451 and 501 of Hamada shown in Figures 37, and 44, respectively, as cited by the

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Examiner, do not show or suggest these required elements of claims 1 and 11. First, the upper surface 457 and the lower surface 471 of the rasp 451 shown in Figure 37 of Hamada are smooth and to not have teeth of any kind on these surfaces. Furthermore, the upper surface 507 and the lower surface 521 of the rasp 501 shown in Figure 44 of Hamada are provided with rasp surface. These rasp surfaces do not show any teeth that are "angling back toward the anterior end of the body," as required by claims 1 and 11. Therefore, Hamada does not disclose every limitation of claims 1 and 11, and thus does not anticipate claims 1 and 11 under 35 U.S.C. § 102(e).

Independent claims 21 and 31 of the present application both require, among other elements: "a first plurality of ratcheting teeth extending across the upper surface of the body; and a second plurality of ratcheting teeth extending across the lower surface of the body." According to the specification of the present application, as originally filed, "ratcheting teeth" 46 are provided on the upper and lower surfaces 32, 34 of the body 30 to "1) distract the disc space between two vertebral bodies without cutting or shaving bone tissue when the broach is inserted therein, and 2) cut or shave soft tissue or bone when the broach 12 is withdrawn from the disc space, thereby minimizing the risk of pushing tissue towards neural structures." (Specification as originally filed, page 5, paragraphs [0023]-[0024]). This disclosure describes the ratcheting cutting function of the "ratcheting teeth."

In contrast, Hamada does not disclose any device having these required elements. The surgical rasps 451 and 501 of Hamada shown in Figures 37, and 44, respectively, as cited by the Examiner, do not show or suggest the "ratcheting teeth" required by claims 21 and 31. First, the upper surface 457 and the lower surface 471 of the rasp 451 shown in Figure 37 of Hamada are smooth and to not have teeth of any kind on these surfaces. Furthermore, the upper surface 507 and the lower surface 521 of the rasp 451 shown in Figure 44 of Hamada are only provided with

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rasp surface. These rasp surfaces are not "ratcheting teeth" as required by claims 21 and 31. The rasp surfaces 507 and 521 of the rasp 451 remove the bone tissue through a motion that is completely different from the ratcheting motion used with the "ratcheting teeth" of claims 21 and 31. The rasp 451 of Hamada operates by "movement of the shaft 459 [sic, 509] to the left and right in FIG. 43 or in a direction into and out of the paper, of insertion member 519, as seen in FIG. 44." (Hamada at column 29, lines 62-66).

Accordingly, withdrawal of this rejection and allowance of independent claim 1, 11, 21, 31, and claims 2, 3, 8-10, 12, 13, 18-20, 22, 23, 28-30, 32, 33, and 38-40 depending therefrom, are respectfully requested.

III. Rejection Under 35 U.S.C. § 103

The Examiner has rejected claims 9, 19, 29, and 39 under 35 U.S.C. § 103(a) as being unpatentable over Hamada. Specifically, the Examiner stated that it would have been obvious to one having ordinary skill in the art at the time of the invention to design the instrument such that the upper and lower surfaces of the instrument are tapered at an angle of about 7 degrees from the anterior and to the posterior end.

In view of the arguments presented by the applicant in reference to the rejection of claims 1-3, 8, 10-13, 18, 20-23, 28, 30-33, 38, and 40 under 35 U.S.C. § 102, above, the applicant believes this rejection is now moot since claims 9, 19, 29, and 39 depend from allowable base claims. Accordingly, withdrawal of the rejection and allowance of claims 9, 19, 29, and 39 are respectfully requested.

Notwithstanding the above, the Examiner is reminded that:

The Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. "[The Examiner] can satisfy this burden only by

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showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992).

In this case, the Examiner has not sustained the burden of proof of establishing a *prima facie* case of obviousness. There is absolutely nothing in Hamada which suggests that the upper and lower surfaces of the instrument taper from the anterior end to the posterior end at an angle of about 7 degrees. As such, the rejection of claims 9, 19, 29, and 39 under 35 U.S.C. § 103(a) over Hamada is improper and should be withdrawn.

IV. Allowable Subject Matter

Applicant note with appreciation that the Examiner has indicated that claims 4-7, 14-17, 24-27, and 34-37 contain allowable subject matter and that they would be allowed if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In view of the arguments presented by the applicant in reference to the rejection of claims 1-3, 8, 10-13, 18, 20-23, 28, 30-33, 38, and 40 under 35 U.S.C. § 102, above, the applicant believes that claims 4-7, 14-17, 24-27, and 34-37 do not need to be rewritten because they depend from allowable base claims. Accordingly, allowance of claims 4-7, 14-17, 24-27, and 34-37, as filed, is respectfully requested.

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V. Summary

Applicant believes that all of the Examiner's objections and the rejections have been addressed and overcome. Applicant has shown that the reference cited, Hamada, neither anticipates nor render obvious the invention claimed. Accordingly, reconsideration, withdrawal of the objections and rejections and allowance of the claims are respectfully requested.

If the Examiner believes the prosecution of this application would be advanced by a telephone call, the Examiner is invited to contact the applicant's attorney at the telephone number indicated below.

No fees are believed required for the filing of this Amendment and Response.

Respectfully submitted,

Date: 11/21/03

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